

NIKITINA, A.I., kand.sel'skokhoz.nauk; KALININA, Ye.I.

Antibiotics in controlling soybean diseases. Zashch. rast. ot vred.  
i bol. 7 no.11:31-32 N '62. (MIRA 16:7)



WILSON, A. P.

WILSON, A. P. -- "The Role of the Annealing Process in the Formation of Dislocations Occurring in Metal at Various Temperatures." Thesis State University of Moscow, 1974. Dissertation for the Degree of Candidate in Physico-mathematical Science.

So: Zhiznennaya Letopis', No. 1, 1974

SOV 157 58 11 20097

Translation from: Referativnyy zhurnal. Metallurgiya, 1958, Nr 11, p 222 (USSR)

AUTHORS: Nikitina, A. K., Bol'shanina, M. A.

TITLE: The Effect of Strain Rate on the Softening of Copper (Vliyaniye skorosti deformatsii na razuprochneniye medi)

PERIODICAL: V sb.: Issled. po fiz. tverdogo tela. Moscow, AN SSSR, 1957 pp 146-151

ABSTRACT: The temperature stability of distortions produced in Cu at various strain rates (R) was investigated experimentally together with the kinetics of the softening of the metal at different annealing temperatures. The tests were carried out on a Cu wire (M1 grade, 0.5 mm diam) which was cut into specimens (S) of a design length of 50 mm. Preliminary cold hardening was achieved by means of static elongation of the S by an amount equivalent to 26% at rates  $v_1 = 0.03\%/min$  and  $v_2 = 28.5\%/min$ . The S were then annealed in vacuum for a period of one hour at temperatures ranging from 150 through 350°C. After annealing, all S were again elongated this time by 4% at a rate of 0.3%/min. The true-stress value thus obtained served as a measure of the degree of cold-hardening remaining after annealing. The test

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SOV 137 58 11 2 1977

The Effect of Strain Rate on the Softening of Copper

results were plotted in the form of curves representing the true stresses arising during the second elongation (at a rate of 0.3%/min) as a function of the annealing temperature. It is shown that increasing the elongation rate results in an increased resistance to deformation. Compared with S which have been elongated at a slow rate, specimens which have been subjected to rapid elongation and which exhibited a higher resistance to deformation at room temperature begin to soften at a lower temperature. The recovery isotherms derived as functions of the anneal time possess the customary shape. The sharpest drop in the isotherm is observed during short periods of annealing; it is also most pronounced as the preliminary elongation rate and the annealing temperature are increased. Based on an analysis of the experimental results it is concluded that an increase in the rate of elongation not only leads to quantitative changes in the degree of cold-hardening but also results in a modification of the nature of this process which is manifested by a change in the temperature stability of the distortions induced in the metal at various rates of elongation.

V N

Card 2/2

3772  
S/139/62/000/002/010/015  
E073/E535

AUTHORS: Bol'shanina, M.A., Korotayev, A.D. and Nikitina, A.K.

TITLE: On the temperature-speed dependence of the flow stresses of NiFe and NiFeCr. II

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Fizika, no.2, 1962, 131-137

TEXT: In an earlier paper (pp.125-130 of this issue) the influence of the short-range order and the K-state on the temperature-speed dependence of flow stresses in nickel-base alloys was investigated. In this paper the same dependence was studied for the binary alloy NiFe containing 81% Ni and the ternary alloy Ni<sub>3</sub>Fe+3% Cr. It was found that the formation of a K-state in the Ni<sub>3</sub>FeCr alloy does not bring about considerable strengthening as compared with the strengthening during formation of an ordinary short-range order in the alloy. Plastic deformation in the range of intensive formation of the K-state and the short-range order occurs in jumps and the nature of the deformation in jumps is identical in all cases. In the alloy NiFe<sub>0.8</sub>, the deformation in jumps is accompanied by an anomalous

Card 1/2

On the temperature-speed ...

0/139/62/000/002/020/028  
E073/E535

temperature-speed dependence of the flow stress. In the NiFeCr alloy no speed dependence was observed, whilst in the NiFe alloy a normal dependence of the flow stress on the temperature and speed of deformation was found to exist. At the temperature of formation of the K-state and of the short-range order a sharp drop in the plasticity was observed. There are 4 figures and 2 tables.

ASSOCIATION: Sibirskiy fiziko-tekhnicheskoy institut pri  
Tomskom gosuniversitete imeni V. V. Kuybysheva  
(Siberian Physico-technical Institute at the  
Tomsk State University imeni V. V. Kuybyshev)

SUBMITTED: July 13, 1961

Card 2/2

30601  
S/126/62/013/003/017/023  
E193/E383

18.11.50

AUTHORS: Korotayev, A.D. and Nikitina, A.K.

TITLE: Effect of quenching conditions and plastic deformation on the formation of the K-state in a Ni-Fe-Mo alloy

PERIODICAL: Fizika metallov i metallovedeniye, v. 13, no. 3, 1962, 454 - 457

TEXT: The object of the present investigation was to study the part played by excess vacancies in the formation of the K-state. To this end, specimens of an alloy whose composition corresponded to Ni<sub>2</sub>Fe + 3% Mo were quenched from various temperatures at various cooling rates, after which the temperature dependence of specific heat and electrical resistivity of the alloy were determined. In addition, the variation of these two properties was studied on specimens which, after preliminary quenching followed by plastic deformation, were isothermally heat-treated at various temperatures. The formation of the K-state in quenched specimens was indicated by a minimum on the temperature-dependence of specific heat; on increasing the quenching temperature from 950 - 1 150 °C the position of this

Card 1/3

X



S/126/62/013/003/017/023  
E193/E383

Effect of quenching ....

minimum was shifted from 470 to about 420 °C. The temperature interval of maximum intensity of the formation of the K-state (as revealed by the variation in specific heat) was studied also by electrical-resistivity measurements. The results showed that the intensity of the process studied was increased several times when the concentration of vacancies in the alloy was increased by quenching it (from 950 °C) in water instead of in air. The effect of excess vacancies on the formation of the K-state was also demonstrated by the results of experiments carried out on specimens quenched and then plastically deformed. These are reproduced in Fig. 3, where the increase in electrical resistivity ( $\Delta\rho/\rho$ , %) of specimens isothermally heat-treated at 400 °C is plotted against the ageing time (hours), curve 1 relating to water-quenched material, curves 2-4 to material which after quenching had been given 1, 5 and 15% reduction, respectively. Finally, the existence of a close relationship between the presence of excess vacancies and formation of the K-state was indicated by the fact that tentatively determined activation energy for this process was found to be  $36 \pm 3$  kcal/mole.

Card 2/3

Effect of quenching ....

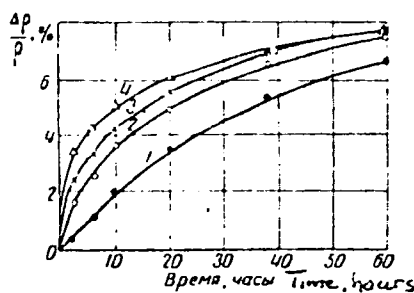
S/126/62/013/003/017/023  
E193/E383

which was very close to the activation energy for movement of vacancies in some nickel alloys with properties similar to those of the alloy studied by the present authors. There are 4 figures.

ASSOCIATION: Sibirskiy fiziko-tekhnicheskiy institut  
(Siberian Physicotechnical Institute)

SUBMITTED: August 5, 1961

Fig. 3:



Card 3/3

KARPOV, V.I.; KOLESNIKOV, A.F.; NIKITINA, A.K.; PRISHCHEPA, M.I.

Impact toughness of G13L steel at low temperatures. Metalloved. i  
term. obr. met. no.7:39-40 J1 '64.

1. Omskiy institut inzhenerov zheleznodorozhnogo transporta.

BUKHOVETS, G.I.; KUZ'MENKO, G.N.; NIKITINA, A.M.; ROKOTOVA, N.A.

Determining the type of the higher nervous system in man. Uch.zap.  
Ped.inst.Gerts. 1083-11. '55. (MLRA 10:3)  
(TEMPERAMENT)

NIKITINA, A. M.

✓6067. Mechanism of cortical connection under conditioned inhibition. A. M. Nikitina. *Uchen. Zap. Leningr. ped. Inst.*, 1955, 108, 67-81. *Referat. Zh. Biol.*, 1956, Abstr. No. 83284. — A conditioned inhibition is induced in dogs after a stage of secondary conditioned reflex, it is displayed at the 5th—7th application and reinforced at the 86th—78th. A secondary conditioned inhibition is reinforced after 8—17 applications. On the transformation of the primary conditioned inhibition into a positive conditioned signal the secondary conditioned inhibition retains the previous inhibitory significance. It speaks for an immediate connection between a cortical site of an inhibitory supplementary agent and a cortical centre corresponding to the unconditioned reflex. The duration of the state of inhibition after the application of the conditioned inhibition is 10—20 min. (Russian)

J. P. HARDING

NIKITINA, A. M.

PA 19/49T3

USSR/Chemistry - Polymerization

Sep/Oct 48

"Studies of the Polymerization Process by Means of Fresnel's Diffraction," A. N. Nikitina, Inst Org Chem, Acad Sci USSR, 5 $\frac{1}{4}$  pp

"Iz Ak Nauk SSSR, Ser Fiz" Vol XII, No 5

Existing methods for studying polymerization processes either do not provide for continuous observation, or involve use of expensive apparatus. Describes simple method for continuous observation of process, based on Fresnel's diffraction. Includes two sketches, three graphs, and one table.

19/49T3

MAYBORODA, V.I.; PANINA, L.D.; VANIFAT'YEVA, K.P.; NIKITINA, A.M.;  
CHUDAKOVA, N.I.

Mass coloration of capron. Khim.volok. no.5:52-55 '62.  
(MIRA 15:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut  
iskusstvennogo volokna (for Mayboroda, Panina, Vanifat'yeva).
2. Klinskiy kombinat iskusstvennogo i sinteticheskogo  
volokna (for Nikitina, Chudakova).  
(Dyes and dyeing—Nylon)

KHARITONOVA, G.N.; NIKITINA, A.M.; CHUDAKOVA, N.I.

Loose nylon dyeing. Khim. volok. no.2:61-62 '65.

(MIRA 18:6)

1. Klinskiy kombinat.



CA NIKITINA, A.N.

2

Investigation of the polymerization process by the method of Fresnel diffraction. A. N. Nikitina (Acad. Sci., U.S.S.R.). *Invent. Akad. Nauk S.S.S.R., Ser. Fiz.* 12, 651-6 (1948).—A glass or quartz plate of refractive index  $n_1$  and thickness  $d$  is placed in a polymerizing liquid of index  $n_2$ . In this case  $(n_2 - n_1)d = \Delta x$  and  $\Delta x$  can be measured. ( $\Delta x$  = difference in path between light passing through the liquid and that passing through the plate.) An optil. setup is described in which the polymerizing liquid is placed in a thermostat regulated to  $0.04^\circ$  and illuminated by the 5461-A Hg line. Dimethylvinylethynylcarbinol was polymerized at  $34.5 \pm 0.5^\circ$  and  $64.5 \pm 0.5^\circ$  in the presence of  $\text{HNO}_3$  and benzoyl peroxide as catalysts. In the case of  $\text{HNO}_3$ ,  $n_2$  increases, first parabolically, then linearly, with time; in the case of the peroxide the increase is linear. This method offers considerable advantages (such as isothermal reaction) for the study of polymerization reactions. S. Pakswar

CA NIKITINA, A.M.

/ Refractometer of constant action. A. N. Nikitina and  
I. V. Obrezanov (Chem. Sci.). *Izvest. Akad. Nauk S.S.S.R.,  
Ser. Fiz. 14, 657-9(1980).*—The open vessel for the poly-  
merization reaction described previously (cf. C.A. 44,  
5491h) has been replaced by a sealed-in ampul. Measure-  
ments are made in ethylene glycol thermostats adjustable to  
 $\pm 0.1^\circ$ . Measurements of  $\alpha$  are taken during the poly-  
merization of cyclopentadiene at 60, 80, and 97° S. P.

NIKITINA, A. N.

1. Absorption spectra of poly- and monostyrene at low temperature. A. N. Nikitina. *Izvest. Akad. Nauk S.S.S.R., Ser. Fiz.* 17, 728-732 (1953).—Absorption spectra of mono- and polystyrene, 1-vinylnaphthalene, and poly-1-vinylnaphthalene were measured at room temp. and  $-195^{\circ}$ . Polystyrene films 60-5  $\mu$  were cast on Hg. Monostyrene layers 4-1  $\mu$  and 1-vinylnaphthalene layers 0.8-2.0  $\mu$  were obtained by squeezing a drop of substance between 2 quartz plates. Layers of poly-1-vinylnaphthalene 0.5-1.5  $\mu$  were deposited from soln. onto a quartz plate. The 3 broad absorption bands of styrene are split up at  $-195^{\circ}$  into 12 narrow bands; the continuous spectrum is resolved into 7 wide bands; the spectrum of polystyrene contains at both temps. 8 wide bands. This spectrum is very similar to the ethylbenzene spectrum and it is presumed that the light is absorbed in the mol. of polystyrene by the benzene ring. 1-Vinyl and poly-1-vinylnaphthalene have similar spectra consisting of 6 bands both at room temp. and at  $-195^{\circ}$ ; the spectrum coincides with the naphthalene spectrum. The absorption of a polymerized mol. is conditioned by the absorption of its sep. links. S. Pakawer

10-12-54

mlk

Inst. Org. Chem. AS USSR

*NIKITINA, A. N.*

**USSR/Chemistry - Spectral analysis**

**Card 1/1**      **Pub. 43 - 61/62**

**Authors**      • Nikitina, A. N., and Ter-Sarkisyan, G. S.

**Title**          • Absorption spectra of certain nitrogen-containing heterocyclic compounds at low temperature

**Periodical**   • Izv. AN SSSR. Ser. fiz. 18/6, 740-741, Nov-Dec 1954

**Abstract**     • The electron absorption spectra of various nitrogen-containing heterocyclic compounds were investigated at room temperature and at -195 and even -259°C. It was found that a drop in temperature from room temperature to that of liquid nitrogen and liquid hydrogen bring about a change in the absorption spectra of the compounds investigated. It was also established that the substitution of the carbon atom in cycles of aromatic compounds by a nitrogen atom does not result in considerable changes in the electron cloud of molecules of the investigated compounds. One USSR reference (1952).  
Illustrations.

**Institution:** Acad. of Sc., USSR, The N. D. Zelinskiy Inst. of Organ. Chem.

**Submitted :** .....

NIKITINA, A.N.; SAFONOVA, V.M.

Change of the refractive index of organic liquids in a wide temperature range. Zhur.fiz.khim. 29 no.2:356-358 P '55. (MLRA 8:7)

1. Akademiya nauk SSSR, Institut organicheskoy khimii, Moscow.  
(Refractive index) (Chemistry, Organic)

NIKITINA, A.N.

5594. ABSORPTION SPECTRA OF CERTAIN NITROGEN-CONTAINING HETEROCYCLIC COMPOUNDS AT LOW TEMPERATURES S.A.N. NIKITINA and G.S. Ter-Sarkisyan

Optika i Spektrosk., Vol. 1, No. 1, 178-18, 1954. In Russian

A study was made of the absorption spectra of -195°C and -259°C of PYRIMIDINE, QUINOLINE, ACRIDINE and derivatives thereof, some of which are known to be substituting a nitrogen atom for a carbon atom in the heterocyclic ring system. It was found to cause marked changes in the absorption spectra of the compounds.

G.S. Ter-Sarkisyan

1954

for

1954 on

USSR/Farm Animals - Wild Animals.

Q-6

Abs Jour : Ref Zhur - Biol., No 1, 1958, 2623

Author : S.A. Illarionov, A.N. Nikitina

Inst : -

Title : Early Rejection and Removal of Females from the Original Group, and the Preliminary Selection of Young Foxes.

Orig Pub : Karakulevodstvo i zverevodstvo, 1956, No 5, 34-36

Abstract : On the basis of the experience gained at the Biryulinskyy zverosovkhoz [sovkhov dealing with breeding of wild life animals], it is recommended that as soon as the young foxes are born, the mothers with any deformity of reproduction organs should be removed from the group. According to the author, the pedigreed young stock, represented by well developed pups should be removed soon after birth. Later, the selection is made according to the health of the pups, their development, the degree of shedding of the summer fur, the coloring of the fur, and the quality of a formed winter coat.

Card 1/1

*N. K. TINA, A. N.*

AUTHORS:

*Nikitina, A. N., Malanin, M. I., Aronovich, P. M., 1955-1-2/20  
Shevchukova, T. A., Ikadylov, S. S.*

TITLE:

*An Investigation of Boron Organic Compounds for their Use as Scintillators (Issledovanie organicheskikh slozheniy borov dlya primeneniya v kachestve skintillirovannykh sred)*

PERIODICAL:

*Izvestiya AN SSSR Seriya Fizicheskaya, 1955, Vol. 22, No. 1, pp. 12-15 (USSR)*

ABSTRACT:

The authors investigated a number of organoboron compounds (some of them were for the first time obtained in reference 3) for the purpose of determining the possibility of using them for the recording of slow neutrons. The esters of alkyl- and arylboric acid were investigated on their introduction into a liquid scintillator - a p-terphenyl-solution. It became evident that the intensity of the  $\gamma$ -scintillation of the latter does almost not change. Trimethylborate used in the practice of nuclear physics weakens the fluorescence of the p-terphenyl-solution by 50%. It is shown that the esters of aryl- and diarylboric acid on their introduction into a p-terphenyl-solution cause a considerable weakening of the scintillation of the latter (50-70%). The organoboron compounds with aryl-substituents themselves possess a weak  $\gamma$ -luminescence.

Card 1/2



An Investigation of Boron Organic Compounds Containing Scintillators.

There are 1 table, and 6 references, 5 of which are cited.

ASSOCIATION: Institute for Organic Chemistry imeni N.D. Zelinskiy AS USSR  
(Institut organicheskoy khimii im. N.D. Zelinskogo AN SSSR,  
Institute for Physics imeni P.N. Lebedev AS USSR (Fizicheskii  
institut im. P.N. Lebedeva. AN SSSR,

AVAILABLE: Library of Congress

1. Chemistry 2. Boron compounds--Application

Card 2/2

1. The first part of the document is a list of the names of the

persons who were present at the meeting. The names are listed in

the following order: Mr. [Name], Mr. [Name], Mr. [Name],

NIKITINA, A.H.; GALANIN, M.D.; ARONOVICH, P.M.; SHCHEGOLEVA, T.A.;  
MIKHAYLOV, B.M.

Analysis of scintillators containing boron organic compounds.  
Izv. AN SSSR. Ser. fiz. 22 no.1:14-20 Ja '58. (MIRA 11:2)

1. Institut organicheskoy khimii im. N.D. Zelinskogo AN SSSR i  
Fizicheskoy institut im. P.N. Lebedeva AN SSSR.

(Scintillation counters)  
(Nuclear physics--Instruments)

SOV/51-6-3-12/28

AUTHORS: Nikitina, A.N., Galanin, M.D., Ter-Sarkisyan, G.S. and  
Mikhaylov, B.M.

TITLE: The Absorption and Luminescence Spectra of Solutions of  
Substituted Polyenes (Spektry pogloshcheniya i  
lyuminestsentsiya rastvorov nekotorykh zameshchennykh  
poliyenov)

PERIODICAL: Optika i Spektroskopiya, 1959, Vol 6, Nr 3, pp 354-365,  
(USSR)

ABSTRACT: The authors investigated the electronic absorption spectra  
of eighteen substituted butadienes and hexatrienes dissolved  
in heptane as well as luminescence of solutions of these  
substances in heptane and benzene. All the substances  
studied were purified chromatographically using aluminium  
oxide. The absorption spectra of solutions were measured  
using a spectrophotometer SF-4. The luminescence spectra  
in the visible region were measured by means of a spectro-  
meter consisting of a monochromator UM-2 and a photo-  
multiplier FEU-19. The results obtained are shown in Table  
1. This table includes calculated values of the oscillator  
Card 1/2 strengths of long-wavelength electronic transitions and the

SOV/51-6-3-12/28  
The Absorption and Luminescence Spectra of Solutions of Substituted Polyenes

quantum yields of luminescence. The absorption spectra of solutions of the substituted butadienes and hexatrienes are shown in Figs. 1-8. It was found that the absorption intensities and band positions depend on the degree of departure from coplanarity of conjugated double bonds. It was found also that the quantum yield of luminescence of some substances is higher in benzene solutions and in others it is higher in heptane solutions. Measurements of the excited-state lifetime showed that decrease of the quantum yield of 1,1,4,4-tetraphenyl-butadiene-1,3 in a benzene solution is due primarily to quenching of the second type, while changes of the excited-state lifetime of 1,6-diphenyl-hexatriene-1,3,5 cannot be explained by quenching (Table 2). There are 8 figures, 2 tables and 11 references, of which 2 are Soviet, 8 English and 1 German.

SUBMITTED: January 16, 1958

Card 2/2

L 9809-63

EPF(c)/RWP(j)/RWT(m)/RDS--Pr-Ii/Pc-Ii--MAY/RM/WW

ACCESSION NR: AP3000583

S/0051/63/014/005/0655/0663

65

AUTHOR: Nikitina, A. N.; Ter-Sarkisyan, G. S.; Mikhaylov, B. M.;  
Minchenkov, L. Ye.

TITLE: Fluorescence of some substituted polyenes

SOURCE: Optika i spektroskopiya, v. 14, no. 5, 1963, 655-663

TOPIC TAGS: hexatrienes, fluorescence, absorption, oscillator strengths

ABSTRACT: In an earlier investigation of the fluorescence and absorption spectra of some substituted butadienes and hexatrienes (Opt. i spektr. 6, 354, 1959) there was observed for 1,6-diphenyl-hexatriene-1,3,5 decrease of the fluorescence yield and increase of the luminescence persistence in going from benzene to heptane solutions. The present study of other members of the hexatriene series was undertaken in order to help clarify this puzzling effect. There were measured the absorption and fluorescence spectra and fluorescence persistences of 13 substituted polyenes in solutions in heptane, benzene and toluene, and in some cases carbon tetrachloride and normal octene-1. The quantum luminescence efficiencies were evaluated and the oscillator strengths of the

Card 1/2

L 9849-63

ACCESSION NR: AF3000583

long wavelength electronic transitions were calculated. The experimental data are tabulated. It was found that similar changes in fluorescence yield and persistence are characteristic of all members of the hexatriene series. The alteration is attributed to interaction of the polyene molecules with the molecules of the solvent. Possibly they associate to form complexes in which the oscillator strength is increased (as compared with the unexcited state) and the excited lifetime reduced. Orig. art. has: 1 equation, 6 figures, and 1 table.

ASSOCIATION: none

SUBMITTED: 08Aug62

DATE ACQ: 12Jun63

ENCL: 00

SUB CODE: CH, PH

NR REF SOV: 008

OTHER: 003

Card

nh/ja  
2/2

SMORCHKOV, V.N.; NIKITINA, A.N.

Simplified photoelectric fluorimeter. Prib. i tekhn. eksp. 8  
no.3:192 My-Je '63. (MIRA 16:9)

1. Institut organicheskoy khimii AN SSSR.  
(Fluorimeter)



L 33802-00 EWT(m)/F RM/WW/JW/JWD

ACC NR: AR6016188

SOURCE CODE: UR/0058/65/000/011/D021/D021

AUTHOR: Nikitina, A. N.; Petukhov, V. A.; Galkin, A. F.; Fedotov, N. S.; Bubnov, Yu. N.

TITLE: Absorption spectra of boro-organic compounds in the vacuum-ultraviolet region <sup>55</sup><sub>B</sub>

SOURCE: Ref. zh. Fizika, Abs. 11D156

REF SOURCE: Tr. Komis. po spektroskopii. AN SSSR, t. 3, vyp. 1, 1964, 369-383

TOPIC TAGS: uv spectrum, absorption spectrum, boron compound, electron spectrum, line intensity, Raman spectrum

ABSTRACT: The authors investigated the electronic absorption spectra of solutions of boro-organic compounds of aromatic and non-aromatic series, and also substituted borazols in the region ~1700 - 3000 Å. The integral intensities of the lines (of the benzene ring) were measured in the Raman spectra of certain boro-organic compounds of the aromatic series. The strong interaction between the boron atom and the aromatic radicals was observed, which was especially strongly manifest in short-wave electron transitions. With increasing interaction the intensity of the corresponding bands decreases. The changes of the spectra observed in the borazols are analogous to the changes of the spectra of the corresponding benzene substitutes. [Translation of abstract]

SUB CODE: 20, 07/

Card 1/1 *dy*

NIKITINA, A.N.; PETUKHOV, V.A.; GALKIN, A.F.; FELOTOV, N.S.; BUBNOV,  
Yu.N.; ARONOVICH, F.M.

Absorption spectra of organoboron compounds in the vacuum  
ultraviolet region. Opt. i spektr. 16 no.6:976-983 Je '64.  
(MIRA 17:9)

NIKITINA, A. P.

USSR/Cosmochemistry - Geochemistry. Hydrochemistry

D.

Abs Jour : Referat Zhur - Khimiya, No 2, 1957, 4159

Author : Nikitina, A. P.

Inst : Academy of Sciences USSR

Title : Nickel Vermiculite from Ukrainian Weathering Shell

Orig Pub : Sb.: Kora vyvetrivaniya, No 2, M., AN SSSR, 1956,  
188-192

Abstract : In biotite fringes of pegmatite veins intersecting am-  
phibolized pyroxenes Ni-vermiculite has been found to-  
gether with montmorillonite. Results of chemical ana-  
lysis (in %):  $\text{SiO}_2$  26.50,  $\text{TiO}_2$  1.69,  $\text{Al}_2\text{O}_3$  12.26,

$\text{Fe}_2\text{O}_3$  19.22,  $\text{FeO}$  5.03,  $\text{MgO}$  13.94,  $\text{CaO}$  0.35,  $\text{NiO}$  8.60,

$\text{MnO}$  0.26,  $\text{R}_2\text{O}$  0.00,  $\text{H}_2\text{O}^+$  9.94,  $\text{H}_2\text{O}^-$  2.56, total 100.35.

Structural formula:  $(\text{H}_3\text{O})_{0.97}(\text{Mg}_{1.68})$

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15-57-1-463

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 1,  
pp 73-74 (USSR)

AUTHORS: Ginzburg, I. I., Nikitina, A. P.

TITLE: The Weathering Products From Certain Chlorites in the  
Ukrainian SSR (Produkty vyvetrivaniya nekotorykh  
khloritov UkrSSR).

PERIODICAL: V sb: Kora vyvetrivaniya, Nr 2, Moscow, AN SSSR, 1956,  
pp 193-215.

ABSTRACT: Chlorites in the weathering crust of ultrabasic rocks  
are widespread. Chlorite rocks that form during  
uralitization of pyroxenites are extensive. Fresh  
chlorite was found in small quantities with jefferi-  
site, which represents the initial stage of weathering  
in the chlorite. The fresh chlorite, in fine scales  
0.5 mm to 1 mm across, is light green. Pleochroism  
is weak, from almost colorless along Np to pale green  
along Ng. The extinction is parallel and the elongation  
positive. Ng' is 1.576, Np' 1.570, and the bire-

Card 1/3

NIKITINA, A.P.

Weathered surface of crystalline rocks in the Saltykov section of the Starooskol'skiy ore center of the Kursk Magnetic Anomaly. Kora vyvetr. no. 3:273-292 '60. (MIRA 13:12)

1. Institut geologii rudnykh mestorozhdeniy, petrografii, mineralogii i geokhimi AN SSSR.  
(Kursk Magnetic Anomaly--Rocks, Crystalline and metamorphic)

GINZBURG, I.I.; NADZHAKOVA, G.E.; NIKITINA, A.P.

Recent and ancient laterite weathering of basalts in Brazil  
and the Russian Platform. Kora vyvetr. no.4:3-95 '62.

(MIRA 15:9)

1. Institut geologii rudnykh mestorozhdeniy, petrografii,  
mineralologii i geokhimii AN SSSR.

(Brazil--Weathering) (Brazil--Basalt)

(Russian Platform--Weathering)

(Russian Platform--Basalt)

NIKITINA, A.P.; KOROLEV, Yu.M.; VORONTSOV, V.G.

Palygorskite and saponite from the weathering surface of  
the Kursk Magnetic Anomaly. Kora vyvetr. no.6:48-54 '63.  
(MIRA 17:9)

1. Institut geologii rudnykh mestorozhdeniy, petrografii,  
mineralologii i geokhimii AN SSSR, Moskva (for Nikitina).
2. Institut geologii i razrabotki goryuchikh iskopayemykh AN  
SSSR, Moskva. (for Korolev). 3. Nauchno-issledovatel'skiy  
institut stroitel'nogo osusheniya, Belgorod (for Vorontsov).

NEKITINA, A.P.

Formation and types of weathering surfaces on rocks of the crystalline basement of the Kursk Magnetic Anomaly. Kora vyvetr. no.6:102-124 '63. (MIRA 17:9)

1. Institut geologii rudnykh mestorozhdeniy, petrografii, mineralogii i geokhimii AN SSSR, Moskva.



ALABAMA, U.S.; DISTRICT OF COLUMBIA, U.S.

1. Auxites in the area of the ...  
2. Near the ...

3. Help ...  
4. ...  
5. ...

BUGEL'SKIY, Yu.Yu.; VITOVSKAYA, I.V.; GODLEVSKIY, M.N.; ZVEREVA, Ye.A.; KORIN,  
I.Z.; NIKITIN, K.K.; NIKITINA, A.P.; PISEMSKIY, G.V.; SAPOZHNIKOV, D.G.;  
SOKOLOV, G.A.; CHUKHROV, F.V.; SHCHERBAKOV, D.I.; EDEL'SHTEYN, I.I.;  
YANITSKIY, A.A.

Il'ia Isaakovich Ginzburg, 1882?-1965; obituary. Geol.rud.mestorozh.  
7 no.4:109-110 Ял-Ag '65. (MIRA 18:8)

"The Results of Forest Cultivation on the Fields of the Lower  
Volga (Urdin and Astrakhan Sands)." Cand Agr Sci, Leningrad Order  
of Lenin Forestry Engineering Academy imeni S. M. Kirov, Leningrad, 1955.  
(KL, No 13, Mar 55)

SO: Sum No. 670, 29 Sep 55 - Survey of Scientific and Technical Dis-  
sertations Defended at USSR Higher Educational Institutions (15)

I. 18900-63  
RM/WW/MAY

EPR/EMI(j)/EPF(c)/EWT(m)/BDS ASD/ESD-3 Ps-4/Pc-4/Pr-4

ACCESSION NR: AP3006591

S/0020/63/151/006/1322/1325 78

AUTHORS: Bresler, L. S. (Corr. member AN SSSR); Dolgoplosk, B. A.; Kropacheva, Ye. N.; Nel'son, K. V.; Nikitina, A. P.

TITLE: study of copolymerization process of butadiene-1,3 with 2,3-dimethylbutadiene-1,3 in the presence of various catalysts of the ionic type.

SOURCE: AN SSSR. Doklady\*, v.151, no. 6, 1963, 1322-1325

TOPIC TAGS: butadiene, synthetic rubber copolymerization, lithium, 2,3-dimethylbutadiene, butyllithium, HCl, C sup 14, Al, tetrahydrofuran, IR, absorption spectrum, 2,3-dimethylbutadiene, aluminum, Li

ABSTRACT: The relative activities of 2,3-dimethylbutadiene and butadiene during its copolymerization in the presence of anionic type catalysts such as butyllithium complex with tetrahydrofuran, cationic type catalysts such as aluminum ethylchloride in the presence of hydrochloric acid, and complex organo-metallic catalysts was studied. The microstructures of the polymers obtained by the above systems

Card 1/22

L 18900-63

ACCESSION NR: AP3006591

2

were also studied. Butadiene tagged with carbon C<sup>14</sup> was used to study the composition of copolymer. The non-radioactive polymeric microstructures were investigated by IR absorption spectra using NaCl prism. The vitrification temperature of the polymerized product mixture of butadiene and 2,3-dimethylbutadiene under the influence of catalysts decreases with an increase in its butadiene ratio. This points to the formation of true copolymers and not homopolymers. It was found that 2,3-dimethylbutadiene is more active in the cationic polymerization mechanism and butadiene is more active in the anionic type polymerization. Copolymers formed in the presence of complex catalysts are enriched in butadiene as compared to the initial monomeric mixture. The relative activity of 2,3-dimethylbutadiene is slightly lower than the activity of isoprene. Orig. art. has: 3 tables and 3 figures.

ASSOCIATION: Nauchno-issledovatel'skiy institut sinteticheskogo kauchuka im. S. V. Lebedeva, (Scientific research institute for synthetic rubber)

Card 2/82

5/032/12/028/056/005/025  
B110/B101

AUTHORS: Mironov, A. N., and Nikitina, A. P.

TITLE: Determination of small amounts of manganese in alloys of magnesium with rare-earths

JOURNAL: Zavodskaya laboratoriya, v. 28, no. 6, 1962, 661 - 663

NOTE: In the presence of cerium, manganese was extracted from its alloys with rare-earths as manganese diethyl dithiocarbamate. Extraction was carried out at pH = 4 - 5.5 in acetate medium without need for complexing agents. The acid solution of the alloy was neutralized with 10% NaOH to pH = 3 - 4 and mixed with an acetate buffer solution along with a 2% solution of sodium diethyl dithiocarbamate. Then, the manganese dithiocarbamate is extracted with carbon tetrachloride,  $\text{H}_2\text{SO}_4$  (1:1) was added, the organic solvent removed by boiling and the residual organic material decomposed by evaporation. Finally,  $\text{H}_2\text{PO}_4$  (1:1) and potassium periodate were added, and the optical density was determined photocolometrically with a green filter. At pH = 5.5, the manganese could be fully extracted in one cycle.  
Card 1/2

Determination of small amounts of ...

5/032, 62/028/006, 019, 013  
5110/5101

There are 2 tables.

ASSOCIATION: Bereznikovskiy Filial Vsesoyuznogo alyuminiyevo-magnitnyego  
instituta (Berezniki Branch of the All-Union Institute of  
Aluminum and Magnesium)

Orig: 2/2

SHUBIN, A.S.; MAZURENKO, N.P.; NIKITINA, A.S.

Electron microscopy of Mazurenko virus in tissues of leukemic rats. Neoplasma (Bratisl) 12 no.3:261-264 '65.

1. Institut eksperimental'noy i klinicheskoy onkologii AMN SSSR, Moskva, SSSR.



27031

S/125/61/000/002/003/013

A161/A133

18 8300

1 2310

AUTHORS: Vabkin, D. M., Yagupol'skaya, L. N., Nikitina, A. V., Grabin, V. F.

TITLE: Effect of heat treatment on the corrosion resistance of AMg6 alloy and its welds

PERIODICAL: Avtomaticheskaya svarka, no. 2, 1961, 40-47

TEXT: The AMr6 (AMg6) alloy is an extensively used alloy that is corrosion-proof in air but not so in sea water. It is used in shipbuilding, apart from many other applications. It has been known for a long time that Al-Mg alloys with above 5% Mg are prone to sea water corrosion after hardening and aging, and the AMg6 can contain as much as 6.5% Mg. The described tests were carried out because of contradictory data in literature on the effect of heat treatment on such alloy grades. Two studied AMg heats had the following composition: 1) (%) 6.2 Mg, 0.70 Mn, 0.25 Fe, 0.25 Si, 0.14 Ti; 2) 6.5 Mg, 0.59 Mn, 0.05 Fe, 0.06 Si, 0.10 Ti. The welds were produced with an automatic argon arc process, with tungsten electrodes and filler wire of AMg6. The corrosion test solution was water with 3% NaCl + 1% HCl; tests were carried out at 20°C, for 24 and 48 hours, and the test techniques corresponding to those described by P. Brenner and W. Roth

Card 1/3

the behavior of metal appears to depend somehow on the state of the grain boundaries themselves, as this was noticed by F. Erdmann-Jesnitzer [Ref. 15: Inter-

27031

Effect of heat treatment on the corrosion ...

S/125/61/000/002/003/013  
A161/A133

Soviet bloc. Two references to English-language publications read as follows:  
F. M. Reinhart, G. A. Ellinger, Corrosion resistance of aluminum alloys, Light  
Metal Age, 14, N. 5-6, 16, 1956; P. Brenner, W. Roth, Recent developments in  
corrosion-resistant Al-Mg alloys. J. Institute of Metals, 74, p. 159, 1947.

ASSOCIATION: Ordena Trudovogo Krasnogo Znameni Institut elektrosvarki im. Ye. O.  
Patona AN USSR (Electric Welding Institute "Order of the Red Banner  
of Labor" AS UkrSSR)

SUBMITTED: June 15, 1960

Card 3/3

S/125/62/000/009/004/008  
A006/A101

AUTHORS: Rabkin, D. M., Nikitina, A. V.

TITLE: The structure of an aluminum seam

PERIODICAL: Avtomaticheskaya svarka, no. 9, 1962, 50 - 56

TEXT: The authors studied the effect of the welding speed, the thickness of the base metal and the temperature of preheating the base metal, upon the structure of "A00" aluminum seams with a relatively low content of impurities (0.08% Fe, 0.07% Si, 0.005% Cu). The welding speed varied from 13.9 to 42 m/hour; the welded plates were 6 - 25 mm thick and the preheating temperature was 100, 200, 300 and 400°C. To study the effect of the basic metal grains upon the nature of crystallite growth near the fusion line, plates with different grain size were produced by annealing and deformation. It was found that the microstructure of aluminum welds is characterized by a columnar orientation of crystallites; directly near the fusion line the crystallites of the weld are the prolongation of fused metal grains. The crystallite size increases with coarser weld metal grains. Beyond the fusion line, the crystallite size does practically not depend ✓

Card 1/2

NIKITINA, A.V.; RYABOV, V.R.; RABKIN, D.M.

Revealing the macro- and microstructure of weld joints between steel and  
aluminum. Avtom. svar. 16 nq.4:83-85 Ap '63. (MIRA 16:4)  
(Steel—Welding) (Aluminum—Welding) (Metallography)

NIKITINA, A.V.; LABEIN, I.V.

Effect of the rate of welded plate cooling on the properties  
of joints in the AMg6 alloy. Avtom. svar. 17 no. 8: 1-30, 82  
1964. (MIRA 1:111)

1. Institut Elektrosvar. Leningrad. AN SSSR.

L 12964-65 EWT(m)/EWA(d)/EWP(v)/EWP(t)/EPP(k)/EWP(k)/EWP(b) Pf-4/Ps-4 MJW/  
JD/HM

ACCESSION NR: AP4043202

S/0125/64/000/008/0026/0030

AUTHOR: Nikitina, A. V.; Rabkin, D. H.

TITLE: Effect of the cooling rate of AMg6 alloy welds on the weld properties <sup>13</sup>

SOURCE: Avtomaticheskaya svarka, <sup>17</sup>no. 8, 1964, 26-30

TOPIC TAGS: AMg6 alloy, AMg6 alloy weld, AMg6 alloy weld property, AMg6 alloy weld strength, AMg6 alloy weld structure

ABSTRACT: The effect of the cooling rate on weld properties in AMg6 alloy has been studied in MIG-welded plates 12 mm thick and 30-200 mm wide, and in submerged arc-welded plates 6 mm thick and 15-250 mm wide. The content of Mg in the base metal amounted to 6.0% and in the electrode wire, to 6.2%. Experiments showed that the weld strength depends greatly on the rate of weld cooling, i.e., on the width of the plate. In MIG-welded plates it varied from 22.6-23.0 kg/mm<sup>2</sup> in the plate 30 mm wide to 29.9-31.0 kg/mm<sup>2</sup> in the plate 150 mm wide, and in submerged arc-welded plates, from 14.1-14.0 kg/mm<sup>2</sup> in the plate 20 mm wide to 23.3-24.7 kg/mm<sup>2</sup> in the plate 250 mm wide. A sharp

Card 1/2

L 12964-65

ACCESSION NR: AP4043202

2

drop in the cooling rate was observed in plates whose width was less than 65-100 mm. Decrease of weld strength and ductility was particularly pronounced in plates 6 mm thick and 35-50 mm wide joined by MIG welding with full penetration and in plates 12 mm thick and 65-100 mm wide welded by submerged arc. At a high cooling rate (wide plates) the microhardness of aluminum solid solution amounted to 88 kg/mm<sup>2</sup>, while at a low rate (narrow plates) it was 64 kg/mm<sup>2</sup>. The decrease in mechanical properties of narrow plates is caused mostly by weld porosity and to a certain extent by precipitation of  $\beta$ -phase particles and a slight decrease of Mg content in aluminum-base solid solution. In single-pass welding the plate width must be at least 6-10 times larger than the thickness to ensure adequate weld properties. Orig. art. has: 5 figures and 2 tables.

ASSOCIATION: Institut elektrosvariki im Ye. O. Patona AN UkrSSR (Electric Welding Institute, AN UkrSSR)

SUBMITTED: 09Jul63

ATD PRESS: 3096

ENCL: 00

SUB CODE: MM

NO REF SOV: 003

OTHER: 002

Cord 2/2

L 35871-66 EWT(m)/EWP(t)/ETI IJP(c) JH/JD/WW/JG/WB

ACC NR: AP6021486

SOURCE CODE: UR/0413/66/000/011/0128/0128

INVENTOR: Rabkin, D. M.; Yagupol'skaya, L. N.; Langer, N. A.; Dovbishchenko, I. V.; Nikitina, A. V.; Zotova, L. M.; Martynova, N. A.; Yelagin, V. I.; Ishchenko, A. Ya.; Bondar', V. V.

ORG: none

TITLE: Filler-wire for argon-shielded arc welding of aluminum. Class 49, No. 182487  
[announced by the Electric Welding Institute im. Ye. O. Paton (Institut elektrosvarki)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 11, 1966, 128

TOPIC TAGS: welding, aluminum ~~welding~~, arc welding, argon, ~~shielded arc welding~~,  
welding wire, aluminum wire, ~~chromium containing wire~~, ~~zirconium containing wire~~  
~~corrosion resistance~~, ~~chromium containing alloy~~, ~~zirconium containing alloy~~

ABSTRACT: This Author Certificate introduces a filler-wire for argon-shielded arc welding of aluminum. To improve the weld corrosion resistance, the wire contains 0.8—1.2% chromium and 0.7—1.2% zirconium. [ND]

SUB CODE: 11, 13/<sup>27</sup> SUBM DATE: 25Dec63/<sup>7</sup> ATD PRESS: 5036

Card 1/1

UDC: 621.791.753.93.042



LOSHKAREVA, G.V.; NIKITINA, B.N.; LOSHKAREVA, T.A.

Fractional detection of cobalt. Izv. vys. ucheb. zav; khim.  
i khim. tekhn. 3 no. 5:960-962 '60. (MIRA 13:12)

1. Ural'skiy politekhnicheskiy institut imeni S.M. Kirova.  
Kafedra analiticheskoy khimii.  
(Cobalt--Analysis)

7

L 5290-66 ENT(m)/EPF(c)/EWP(j) RPL W4/RM  
 ACC NR: AP5022052 SOURCE CODE: UR/0286/65/000/014/0129/0129

AUTHORS: Guseva, I. A., Mal'kov, N. S., Makarov, Yu. A., Kulev, E. A., Izmaylova, I. S., Shvareva, G. N., Khantsis, R. Z., Gladyshev, A. I., Perepelkin, V. P., Nikitina, D. M., Chekunin, K. I., Rodsinskiy, V. V.

ORG: none

TITLE: Method for obtaining copolymers. Class 39, No. 144021

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 14, 1965, 129

TOPIC TAGS: copolymer, pressure casting

ABSTRACT: This Author Certificate presents a method for obtaining copolymers on the basis of methyl methacrylate and esters of acrylic acid by a suspension method. To obtain colorless copolymers suitable for fabricating products by casting under pressure, higher alcohols, e.g., octyl, as a plasticizer, esters of phthalic acid, e.g., dicyclohexyl, as a stabilizer, and derivatives of aminocumarone, e.g., phenyl ester of (naphtho-1', 2', 4', 5')-triazoline (2')-stilbene-2-sulfonic acid, as a clarifier are added to the mixture.

SUB CODE: NT, QC/ SUBM DATE: 15May61/ ORIG REF: 000/ OTH REF: 000

Card 1/1

09010501

NIKITINA, E.M.

Correlation in the development of orientation and conditioned motor reactions in ontogenesis. Zhur. vys. nerv. deiat. 4 no.3:406-414  
My-Je '54. (MLRA 8:2)

1. Laboratoriya sravnitel'nogo ontogeneza nervnoy deyatel'nosti  
Instituta fiziologii AMN SSSR.

(ORIENTATION,

develop. of orientation & conditioned motor reactions in  
dogs, age factors)

(REFLEX, CONDITIONED,

develop. of conditioned & orientation reactions in dogs,  
age factors)

(AGING,

age factor in develop. of orientation & conditioned  
reactions in dogs)

BIRYUZOVA, V.I.; NIKITINA, E.S.

Cytological study of synchronously dividing cultures of *Escherichia coli* "B". *Mikrobiologiya* 30 no.6:1011-1015 N-D '61. (MIRA 14:12)

1. Institut radiatsionnoy i fiziko-khimicheskoy biologii AN SSSR.  
(*ESCHERICHIA COLI*) (BACTERIOLOGY--CULTURES AND CULTURE MEDIA)

KORSHUN, L.L.; NOTKIN, M.M.; NIKITINA, A.S.; SINELOBOV, M.A.;  
POSPELOVA, G.L., nauchn. red.; PETRENKO, V.M., tekhn.  
red.

[Finishing veneerless particle boards] Otdelka nefa-  
nerovannykh struzhechnykh plit. Moskva, TSentr. nauchno-  
issled. in-t informatsii i tekhniko-ekon. issledovaniy po  
lesnoi tseliulozno-bumazhnoi, derevoobrabatyvaiushchei  
promyshl. i lesnomu khoz. 1963. 22 p. (MIRA 16:11)  
(Particle board) (Wood finishing)

BIRYUZOVA, V.I.; NIKITINA, E.S.

Participation of the cytoplasmic membrane of Escherichia coli B.  
cells in the formation of mitochondrial analogs. Izv. AN SSSR.  
Ser. biol. 31 no.1:145-147 Ja-F '66. (MIRA 19:1)

1. Institut molekulyarnoy biologii AN SSSR. Submitted May 2, 1965.

*Nikitina, F. A.*

124-1957-10-11826

Translation from: Referativnyy zhurnal, Mekhanika, 1957, Nr 10, p 91 (USSR)

AUTHOR: Nikitina, F. A.

TITLE: The Rotary Flow Counter of the Rostov Institute of the Academy of Communal Economy (O rotornom schetchike stoka Rostovskogo instituta Akademii kommunal'nogo khozyaystva)

PERIODICAL: Dokl. VASKhNIL, 1956, Nr 11, pp 36-40

ABSTRACT: In view of the fact that no instructions were issued regarding the distances at which the counters should be installed from a water outlet pipe, the Sredne-Aziatskoy n.-i. in-t irrigatsii (Centr. Asian Research Institute for Irrigation) conducted an investigation of the speed diagram in a pipe section located seven (7) diameters from the inlet. The investigations revealed that the instrument is not sufficiently accurate. Several constructional deficiencies were pointed out, viz., the reduction gear was poorly sealed, suspended matter was obstructing the bearings, etc.

V. V. Fandeyev

Card 1/1

*The SVN-5*  
NIKITINA, F.A., Cand Tech Sci -- (diss) "Rotary ~~RELEX~~  
flow meter ~~SVN-5~~, as a means of ~~RELEX~~ automating  
the water count in irrigation systems." Tashkent 1968  
21 pp with illustrations (Acad Sci UzSSR. Inst of water  
Problems and ~~Hydrotechnics~~ *Hydraulic Engineering*) 150 copies (KL, 32-58, 109)

- 35 -



AUTHOR: Nikitina, F.A.

90-1117-1/10

TITLE: Rotary Water Discharge Meter DVN-56 (SANIIRI) - (Potorny  
schetchik stoka DVN-56 (SANIIRI))

PERIODICAL: Gidrotekhnika i melioratsiya, 1952, Nr 7, pp 47-48 (USSR)

ABSTRACT: In 1952, the SANIIRI (Central Asia Scientific Research Institute of Irrigation) hydrometric laboratory designed a discharge water meter for water-measuring installations of irrigation systems. The utilization of a rotary turbine as a primary transducer was the underlying principle for this construction. This rotary discharge water meter DVN-56 (schetchik-vodomer Nikitinoy) has the shape of a square box (90x95x135 mm) and an upper cover which is used for the installation of a semicircular dial (Fig. 1). Two mechanisms are installed within the casing of the device which effect the rotation of the turbine (Fig. 2). The mechanism of the discharge meter consists of an ordinary gear-type reducer transmitting the number of revolutions of the shaft with measuring discs in a ratio: Disc Nr 1 - 1 : 16 · 10<sup>3</sup>, disc Nr 2 - 1 : 16 · 10<sup>4</sup>, disc Nr 3 - 1 : 16 · 10<sup>5</sup>, disc Nr 4 - 1 : 16 · 10<sup>6</sup>. The device is installed in water-measuring structures, the discharge of which can be obtained through the so-called water-measuring drop  $z_k$  accord-

Card 1/2

Water Discharge Meter TM-56 (SANIIRI)

90-18-716/10

ing to the well-known formula:

$$Q = k \omega \sqrt{2gz_k}$$

where  $Q$  is the discharge,  $\omega$  the cross sectional surface and  $z_k$  the drop of pressure. Figure 1 shows the installation of this device into the tubular water meter TVC-54. When designing this device, two conditions had to be especially considered: 1) during operation the freely suspended turbine must be kept in the center of the current and not knock against the wall of the connecting pipe; 2) the velocity of the rotation of the turbine must be in proportion to the velocity of the current. There is 1 photograph, 2 diagrams, and 1 chart.

ASSOCIATION: SANIIRI

1. Irrigations systems
2. Water - Discharge - Measurement
3. Meters - Applications

Card 2/2

NIKITINA, F.A.

New rotary flowmeter for irrigation systems. Dokl. Akad. sel'khoz.  
23 no. 6:38-42 '58. (MIRA 11:7)

1. Sredneaziatskiy nauchno-issledovatel'skiy institut irrigatsii.  
Predstavlena akademikom I.A.Sharovym.  
(Flowmeter)

NIKITINA, F.A.

Rotor water meter developed by the Central Asian Research Institute.  
Trudy SANIIRI 93:115-135 '58. (MIRA 14:5)  
(Water meters)

NIKITINA, F.A., kand.tekhn.nauk

Calculation of Finke's automatic shutters for level maintenance in  
the forebay. Trudy SANIIRI no.106:77-119 '60. (MIRA 14:5)  
(Sluice gates)

NIKITINA, G.G., kandidat meditsinskikh nauk.

Characteristics of gastric resection in extensive kyphosis of  
the thoracic section of the spine. Vest.khir.74 no.2:63-64 Mr '54.  
(MLRA 7:4)

1. Iz Tukumskoy rayonnoy ob'yedinennoy bol'nitsy Latviyskoy SSR  
(direktor - G.F.Maksimova).  
(Stomach--Surgery) (Spine--Abnormities and deformities)

NIKITINA, G.G., kandidat meditsinskikh nauk

A district hospital's data on appendicitis. Vest.khir.76 no.8:  
127-128 S '55. (MLRA 8:11)

1. Iz Tukumskoy rayonnoy bol'nitsy Latviyskoy SSSR.  
(APPENDICITIS)

NIKITINA, G.G.; MAKSIMOVA, G.F.

Mechanism of action of tissue therapy. Vrach.delo no.10:1085-1086  
O '57. (MIRA 10:12)

1. Tukumskaya rayonnaya bol'nitsa Latvyskoy SSR.  
(TISSUE EXTRACTS)



NIKITINA, G.G., kand.med.nauk

Clinicomorphological parallels in senile gangrene [with summary  
in English]. Khirurgiia 33 no.9:54-61 S '57. (MIRA 11:4)

1. Iz 2-y khirurgicheskoy kliniki Respublikanskoy klinicheskoy  
bol'nitsy Latvyskoy SSR (zav. klinikoy - prof. P.I.Stradyn',  
glavnyy vrach N.K.Dabola)

(GANGRENE, in aged  
clin. aspects & pathol.)

(AGED, dis.  
gangrene, clin. aspects & pathol.)

L 00064-66

ACCESSION NR: AP5021322

UR/0120/65/000/004/0005/0013  
621.384.8

AUTHOR: <sup>44</sup>Averina, A. P.; <sup>44</sup>Linnik, L. N.; Nikitina, G. I. <sup>42</sup>B

TITLE: Mass spectrometry for the determination of partial pressures in vacuum systems <sup>9m</sup>

SOURCE: Pribery 1 tekhnika eksperimenta, no. 4, 1965, 5-13

TOPIC TAGS: <sup>10, 44</sup>mass spectrometer, spectrometer, electrical filter, electric measuring instrument

ABSTRACT: This survey paper based on 56 articles describes the omegatron, farvitron, radio-frequency mass spectrometer (topatron), time-of-flight mass spectrometer (chronotron), electrical mass filter, and cycloidal mass spectrometer. The paper presents the basic characteristics of these devices, their merits, and their shortcomings. Orig. art. has: 5 formulas, 12 figures, and 1 table.

ASSOCIATION: None

SUBMITTED: 07Sep64

ENCL: 00

SUB CODE: OP, EE

NO REF SOV: 009

OTHER: 047

Card <sup>mw</sup>1/1

BLYUMKIN, L.M.; LINNIK, L.N.; NIKITINA, G.I.

Possibility for ion mass analysis by the frequency-selective  
method. Prib. i tekhn. eksp. 10 no.5:169-171 S-O '65.  
(MIRA 19:1)

1. Submitted October 10, 1964.

NIKITINA, G.M.

Development of conditioned orientation and motor reflexes from the olfactory analyzer in puppies ontogenesis. Zhur.vys.nerv.deiat. 6  
1:127-136 Ja-F' 56. (MLRA 9:7)

1. Laboratoriya sravnitel'nogo ontogeneza nervnoy sistemy Instituta normal'noy i patologicheskoy fiziologii AME SSSR

(REFLEX, CONDITIONED,

orientation & motor reflexes from olfactory analyzer in young dogs (Rus))

NIKITINA, G.M.

Some characteristics of the extinction of orientation and conditioned defense reflexes in puppies during ontogenesis. Zhur.vys.nerv.deiat. 7 no.6:912-921 M-D '57. (MIRA 11:2)

1. Laboratoriya sravnitel'nogo ontogeneza nervnoy sistemy  
Instituta normal'noy i patologicheskoy fiziologii AMN SSSR.  
(REFLEX, CONDITIONED,  
defense, extinction in young dogs (Rus))  
(REFLEX,  
orientation, extinction in young dogs (Rus))

VOLOKHOV, A.A.; NIKITINA, G.M.; NOVIKOVA, Ye.G.

Development of autonomic phases of orientation defense and conditioned reflexes during the ontogeny of a comparative series of animals. Zhur.vys.nerv.deiat. 9 no.3:420-428 My-Je '59. (MIRA 12:9)

1. Laboratory of Comparative Ontogenesis of the Nervous System, Institute of Normal and Pathological Physiology, U.S.S.R. Academy of Medical Sciences, Moscow.

(HEART - physiology)

(RESPIRATION - physiology)

(REFLEX, CONDITIONED)

(RMFLEX)

ZOLENKOVA, Ye.G.; NIKITINA, G.M.

Data on the orientation reflex in the early postnatal stage of the lower apes. Zhur. vys. nerv. deiat. 9 no.6:858-864 N-D '59.  
(MIRA 13:9)

1. Laboratory of Comparative Ontogenesis of the Nervous System,  
Institute of Normal and Pathological Physiology, U.S.S.R. Academy  
of Medical Sciences, Moscow.  
(ORIENTATION) (INFANTS (NEWBORN))

ZOLENKOVA, Ye.G.; NIKITINA, G.M.

Formation and development of conditioned defensive reflexes in the young of lower monkeys, Zhur. vys. nerv. deiat. 10 no.2:207-216 (MIRA 14:5)  
Mr-Apr '60.

1. Laboratory of Comparative Ontogenesis of the Nervous System,  
Institute of Normal and Pathological Physiology, U.S.S.R. Academy  
of Medical Sciences, Moscow.  
(CONDITIONED RESPONSE)



NIKITINA, G.M.

Effect of the aminazine on the correlation of vegetative and motor components of conditioned defense reactions in animals in ontogenesis. Zhur.vys. nerv. deiat. 11 no.2:329-337 Mr-Apr '61. (MIRA 14:6)

1. Laboratory of Comparative Ontogenesis of the Nervous System,  
Institute of Normal and Pathological Physiology, U.S.S.R. Academy  
of Medical Sciences, Moscow.  
(CHLORPROMAZINE) (CONDITIONED RESPONSE)

KOBYSH, V.I.; NIKITINA, G.M.

Registration of conditioned and unconditioned motor reactions in animals during ontogenesis with the aid of a carbon recorder. Zhur. vys.nerv.deiat. 11 no.3:557-560 My-Je '61. (MIRA 14:7)

1. Laboratory of Comparative Ontogenesis of the Nervous System, Institute of Normal and Pathological Physiology, U.S.S.R. Academy of Medical Sciences, Moscow.

(CONDITIONED RESPONSE)

(NERVOUS SYSTEM)

PISANNIKOV, Guriy Pavlovich; NIKITINA, G.M., doktor tekhn. nauk,  
red.; SHLENNIKOVA, Z.V., red.

[Operation of the electric systems for automatic and remote  
control of marine emergency, port and auxiliary diesel  
generators] Eksploatatsiya elektricheskikh sistem avtomati-  
cheskogo i distantsionnogo upravleniya sudovymi avarijnymi,  
stoianochnymi i vspomogatel'nymi dizel'generatorami. Mo-  
skva, Transport, 1966. 93 p. (MIRA 18:7)

NIKITINA, G.M.; YUSOVA, O.B.

Ontogenetic study of the electroencephalographic expression of the orienting reaction in the hippocampus of a rabbit. Zhur. evol. bio-khim. i fiziol. 1 no.3:269-280 My-Je '65. (MIRA 18:7)

1. Laboratoriya sravnitel'nogo ontogeneza nervnoy sistemy Instituta mozga AMN SSSR, Moskva.

NIKITINA, G.M.; YUSOVA, O.B.

Comparative characteristics of the development of "spontaneous" bioelectrical activity of some structures of the archicortex and neocortex in rabbit ontogeny. Zhur. vys. nerv. deiat. 15 no.5:911-918 S-O '65. (MIRA 18:11)

1. laboratoriya sravnitel'nogo ontogeneza nervnoy sistemy Instituta mozga AMN SSSR, Moskva.

NIKITINA, G.N.

GEZENTSVBY, Z.A., NIKITINA, G.N., (Moscow)

Retrosternal pneumomediastinography as a method for x-ray diagnosis of intrathoracic tumors. Klin.med. 36 no.4:54-58 Ap'58 (MIRA 11:5)

1. Iz rentgenoradiologicheskogo otdeleniya (nach. - dotsent S.A. Sviridov) Tsentral'noy klinicheskoy bol'nitsy Ministerstva puty soobshcheniya (nach. V.N. Zakharchenko)

(MEDIASTINUM, radiography  
retrosternal pneumomediastinography in diag. of  
intrathoracic tumors (Rus))

(THORAX, neoplasms  
intrathoracic, diag., retrosternal pneumomediastino-  
graphy (Rus))

YURGINA, Z.A.; SOKOLOVA, N.M.; NIKITINA, G.P.

Possibility of the prolonged preservation of the plague microbe in  
media from the fermentative hydrolysate of casein. Sbor. nauch.  
rab. Elist. protivochum. sta. no. 1:187-191 '59. (MIRA 13:10)  
(BACTERIOLOGY—CULTURES AND CULTURE MEDIA) (PLAGUE) (CASEIN)

YARIKOV, G.M.; MEL'NIKOVA, A.S.; NIKITINA, G.P.

Carboniferous sediments in western Stalingrad Province. Trudy  
VNIGNI no. 19:112-151 '59. (MIRA 13:12)  
(Stalingrad Province--Geology, Stratigraphic)



NIKITINA, G.P.

Establishment of borders between the Middle and Upper Carboniferous  
taking into consideration the development of the general  
Fusulinella-Obsoletes. Uch.zap. SGU 74:139-146 '60. (MIRA 15:7)  
(Volgograd Province--Paleontology, Stratigraphic)

MEL'NIKOVA, A.S.; GOGINA, Ye.A.; NIKITINA, G.P.; MOROZOVA, R.I.

Stratigraphy and lithology of Carboniferous sediments in Volgograd  
Province. Trudy VNIING no.1:39-90 '62. (MIRA 16:10)

NIKITINA, G. P.

Distr: 4B2c(j)/4E4j

Potentiometric method for the determination of the ion-exchange constant. V. I. Paramonova, G. P. Nikitina, and L. A. Vasil'eva. *Khromatografiya, Leningrad. Gos. univ. im. A. M. Zhukova, Sbornik State 1956, 42-51.*  
The ratio of activities of 2 ions in the equil. soln. with cation-exchange resin can be detd. potentiometrically. From the results, the true ion-exchange const. for the  $Ag^+H^+$  system was detd. for different cation-exchange resins. The resins contg. nuclear sulfonic groups have the const. equal to 18, since they exchange  $Ag^+$  primarily. The other sulfonic resins give lower values for the const.; this can be attributed to the presence of a considerable no. of methylene sulfonic groups. Cation exchange resins of a weak acid type give very low values for the const. (0.4); this indicates that they exchange mostly  $H^+$ . No variation of the ion-exchange const. with the ionic strength has been observed.

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VODEN, V.G.; NIKITINA, G.P.; PUSHLENKOV, M.F.

Investigation of the complex formation of uranyl nitrate with  
phosphorus organic compounds. Radiokhimiia 1 no.2:121-130  
'59. (MIRA 12:8)  
(Uranyl nitrate) (Phosphorus organic compounds)

S/186/60/002/002/012/022  
E071/E433

AUTHORS: Pushlenkov, M.F., Nikitina, G.P. and Voden, V.G.

TITLE: A study of the formation of uranyl nitrate complexes  
with phosphorusorganic compounds. II

PERIODICAL: Radiokhimiya, 1960, Vol.2, No.2, pp.215-221

TEXT: In Part I (Ref.1: V.G.Voden, G.P.Nikitina, M.F.Pushlenkov, Radiokhimiya, 1, 2, 121 (1959)) it was established that uranyl nitrate is transferred from the aqueous phase ( $[HNO_3] = 0.2$  to  $1.1 M$ ) into the organic phase in the form of a disolvate  $UO_2(NO_3)_2 \cdot 2T$  (where  $T = DBEBPh$  di-n.butyl ester of n.butylphosphinic acid or  $TBPhO$  - tri-n.butylphosphin oxide). The stability constants ( $K_K$ ) for the compounds  $UO_2(NO_3)_2 \cdot 2TBPh$  and  $UO_2(NO_3)_2 \cdot 2DBEBPh$  were determined by the distribution method ( $12$  and  $9.5 \times 10^2$  respectively). The calculated stability constant for the latter compound was  $6.3 \times 10^2$ . The difference between the determined and calculated values of the constants was assumed as being due to the presence of oxide impurities which changes the slope of the curve  $\ln S = f([NO_3^-]_w)$  from  $0.6$  to  $1$  and correspondingly increases the value of the constant

$$S = \frac{[NO_3^-]_w^2 [T]_o^2}{K_p}$$

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S/186/60/002/002/012/022

A study of the formation of uranyl .. E071/E433

where  $[\text{NO}_3^-]_w$  is the concentration of  $\text{NO}_3^-$  ions in the equilibrium aqueous solution;  $[\text{T}]_o^2$  - concentration of T in the organic solution;  $K_p$  - coefficient of distribution of  $\text{UO}_2(\text{NO}_3)_2$  between the aqueous and organic phases. The stability constant for  $\text{UO}_2(\text{NO}_3)_2 \cdot 2\text{TBPhO}$  was obtained only by calculation, since the dependence of  $\ln S$  on  $[\text{NO}_3^-]$  was represented by a curve indicating the presence of some factors influencing the distribution which were not taken into consideration. For the system: aqueous solution of uranyl nitrate - solution of n.butyl ester of di-n.butylphosphinic acid in carbon tetrachloride, neither the composition of the complex extracted nor its stability constant were determined. The scope of the present work was to determine the composition and the stability of the complex extracted in the latter system, the determination of the stability constant of  $\text{UO}_2(\text{NO}_3)_2 \cdot 2\text{DBEBPh}$  when the DBEBPh is known to be free from oxide admixtures and to explain the curvature of the relationship  $S = f[\text{NO}_3^-]_w$  for the system: aqueous solution of  $\text{UO}_2(\text{NO}_3)_2$  - TBPhO in  $\text{CCl}_4$ . For this purpose it was necessary to obtain three relationships:

- 1)  $\lg K_p = f(\lg [\text{BEDBPh}]_o)$ , where  $K_p$  - coefficient of distribution of  $\text{UO}_2(\text{NO}_3)_2$  between the aqueous and organic phases;

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S/186/60/002/002/012/022

A study of the formation of uranyl ... E071/E433

2)  $\ln S = f[NO_3^-]_w$  at  $\mu$ ,  $[H^+]_w$ ,  $[T]_o = \text{constant}$  for BEDBPh and  
 3) the same relationship for DBEDBPh. The experimental procedure  
 was the same as in Part I, except that DBEBPh and BEDBPh were  
 purified from oxygen containing impurities by a few days  
 retention over metallic sodium, followed by filtration through a  
 glass filter and a vacuo distillation. The experiments were  
 carried out at a temperature of  $25 \pm 0.05^\circ\text{C}$ . It was established  
 that the composition of the complex compounds of uranyl nitrate  
 with BEDBF extracted by carbon tetrachloride corresponded to the  
 general formula of  $UO_2(NO_3)_2 \cdot 2T$ . The stability constant for  
 $UO_2(NO_3)_2 \cdot 2DBEBPh$  and  $UO_2(NO_3)_2 \cdot 2BEDBPh$  were found to be  
 $6.03 \times 10^2$  and  $2.95 \times 10^4$ , respectively. The curvature of the  
 line representing the relationship  $\ln S = f[NO_3^-]$  for TBPhO at a  
 constant ionic force ( $\mu$ ), pH in the aqueous phase ( $[H^+]_w$ ) and the  
 concentration of TBPhO in the organic phase ( $[T]_o$ ), is apparently  
 caused by the extraction into the organic phase of two other  
 complexes:  $UO_2NO_3ClO_4 \cdot 2TBPhO$  and  $UO_2(ClO_4)_2 \cdot 2TBPhO$ , in addition  
 to  $UO_2(NO_3)_2 \cdot 2TBPhO$ . There are 4 figures, 4 tables and  
 2 references: 1 Soviet and 1 non-Soviet. The reference to an  
 Card 3/4

A study of the formation of uranyl ,. S/186/60/002/002/012/022  
E071/E433

English language publication reads as follows:  
G.M.Kosolapoff. Organophosphorus Compounds, New York - London, 1950.

SUBMITTED: July 11, 1959

Card 4/4



S/186/62/004/002/003/010  
E075/E136

AUTHORS: Nikitina, G.P., and Pushlenkov, M.F.  
TITLE: Mechanism of extraction of zirconium with  
phosphoroorganic compounds. I.

PERIODICAL: Radiokhimiya, v.4, no.2, 1962, 137-147

TEXT: The object of the work was to elucidate the mechanism of extraction of Zr from nitric acid solutions with the following phosphoro-organic compounds: tri-n-butylphosphate (TBF), di-n-butyl ester of n-butylphosphorous acid (DBEBF) and n-butyl ester of di-n-butylphosphorous acid (BEDBF). The extractions were carried out at 250 °C. After extraction, Zr, P and HNO<sub>3</sub> were determined in each phase. <sup>95</sup>Zr was determined by Geiger-Müller counter, non-active Zr was determined spectrophotometrically. It was shown that the solvation numbers for DBEBF are 1.93, 1.95, and for BEDBF 2.12. Since it was found that

$$\frac{\partial \lg K_p}{\partial \lg [H^+]_B} = 2.05 \approx 2$$

(where K<sub>p</sub> is the distribution coefficient)

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Mechanism of extraction of Zr ...

S/186/62/004/002/003/010  
E075/E136

it became evident that 2 ions of H take part in the extraction of Zr and that there is very little formation of complexes of the type  $H_j Me[NO_3]_{i+j}$  in the aqueous phase. The study of the dependence of  $K_p$  (for Zr) on the concentration of  $NO_3$  revealed that there is formation of nitrate complexes in the aqueous phase. It was concluded that the mechanism of extraction is best expressed by the equation

$$ZrO^{2+} + 2H^+ + 4NO_3^- + 2T \xrightleftharpoons{K''_k} H_2ZrO(NO_3)_4 \cdot 2T, \text{ where } T$$

represents a molecule of extractant and  $K''_k$  equilibrium constant for the reaction. The constants for TBF, DBEBF and BEDBF were found to be 2.66,  $2.37 \times 10^{-2}$  and  $6.54 \times 10^{-4}$  respectively. In general it was found that by changing the ester group for an alkyl group in a molecule of the extractant the extraction capacity of the latter became different. For the region of concentrations of  $NO_3^-$  from 0.16 to 2.0 M, ionic strength 2.5 and concentration of  $H^+$  ions equal to 2.5 the

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NIKITINA, G.P.; PUSHLENKOV, M.F.

Vibrational spectra of zirconium complexes with organophosphorus derivatives. Part 1: Spectra of extracts from hydrochloric and nitric acid solutions. Radiokhimiia 5 no.4:436-445 '63.

(MIRA 16:10)

(Zirconium compounds--Spectra)  
(Phosphorus organic compounds)  
(Extraction (Chemistry))

NIKITINA, G.P.; PUSHLENKOV, M.F.

Interaction in the system tri-n-butylphosphine oxide -  
hydrochloric acid. Radiokhimiia 5 no.4:445-456 '63.  
(MIRA 16:10)

(Phosphine oxide) (Hydrochloric acid)